WHAT IS CLAIMED IS

1 . Insulated ultrafine powder comprising electroconductive ultrafine powder which is in the form of sphere, spheroid or acicular each having a minor axis in the range of 1 to 100 nm, and an insulating film applied onto said electroconductive ultrafine powder.

2 . The insulated ultrafine powder according to Claim 1 wherein the insulating film has a relative dielectric constant of at least 20.

3 . The insulated ultrafine powder according to Claim 1 wherein the insulating film comprises at least one species selected from the group consisting of an oxide having insulating properties and a nitride having insulating properties.

4 . The insulated ultrafine powder according to Claim 1 wherein the electroconductive ultrafine powder comprises a metal oxide.

5 . The insulated ultrafine powder according to Claim 1 wherein the insulating film has a thickness being 0.3 nm or larger and not larger than the minor axis of the electroconductive ultrafine powder.

6 . A process for producing insulated ultrafine powder composed of electroconductive ultrafine powder which is in the form of sphere, spheroid or acicular each having a minor axis in the range of 1 to 100 nm and an insulating film which is made of a metal oxide having a relative dielectric constant of at least 20 and which is applied onto said electroconductive ultrafine powder, comprising any of the steps (a), (b) and (c), wherein step (a) comprises dispersing electroconductive ultrafine powder in an organic solvent; adding a metal alkoxide in the resultant dispersion; and precipitating a metal oxide on the surfaces of said electroconductive

ultrafine powder by sol-gel reaction, the step (b) comprises dispersing electroconductive ultrafine powder in an aqueous solution of a metal salt; adding an alkali in the aqueous solution; precipitating a metal hydroxide on the surfaces of said electroconductive ultrafine powder; conducting dehydration condensation reaction by drying; and sticking a metal oxide onto the surfaces of said electroconductive ultrafine powder, and the step (c) comprises simultaneously or consecutively adding an aqueous solution of a metal salt and an aqueous solution of an alkali; precipitating a metal hydroxide on the surfaces of said electroconductive ultrafine powder; conducting dehydration condensation reaction by drying; and sticking a metal oxide onto the surfaces of said electroconductive ultrafine powder, and a subsequent step of calcining the metal oxide precipitated or stuck to the surfaces of said electroconductive ultrafine powder at a temperature higher than a temperature which is 900℃ lower than the melting point of the metal oxide and also at a temperature lower than the melting point thereof.

7 . A resin composite material which comprises at least one species selected from the group consisting of the insulated ultrafine powder as set forth in Claim 1 and polymer at a volumetic ratio (the powder / the polymer) in the range of 5 / 95 to 50 / 50.

8 . The resin composite material according to Claim 7 which further comprises a filler.

9 . The resin composite material according to Claim 7 which has a relative dielectric constant of at least 20.

1 0 . A high dielectric constant film or sheet comprising the resin composite material as set forth in Claim 7 which is formed thereinto.

11. An electronic part which comprises the high dielectric constant film or sheet as set forth in Claim 10.